# International internship in Thailand

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# 1. My schedule

- Term  $1 \sim 29 \text{ August } 2011$
- $1 \sim 14$  August the KMITL
- Day 1 Reach Suwannapoom Airport and Check in Dormitory at KMITL
- Day 2 Introduce STW-LAB Member KMITL TOUR & Welcome Party
- Day3 Thailand's Industrial Case Study
- Day4 Weekly Progress Report for Their Research
- Day5 Research Topic
- Day6 One day trip
- Day7 free day
- Day8 iOS Programming
- Day9 iOS Programming
- Day10 Lecture of Thailand's culture
- Day11 Weekly Progress Report for our Research
- Day12 National Holiday (Mother's day in Thailand)
- Day13 free day
- Day14 One day trip
- 15 ~ 25 August the Thai Bridgesone
- Day15 Orientation Plant tour

Organization of Thai Bridgestone Company

Training system

Day16 Final product testing Kaibo test

Drum test

Day17 Final product testing Initial quality control for mass production

Quality control for running Productions

Day18 Final product inspection Uniformity inspection

Day  $19 \sim 22$  Raw materials inspection/testing

In-process materials inspection/testing

Inspector/Tester Registration rules

Inspection and test rule of in-process material

Mixed compound inspection

Inspection/control of cement

Control test for physical properties of mixed compound

Blow point control

VD Dispersion control (Investigation of cause)

Dip cord inspection control

Steel treatment control

Curled wire treatment control

PT-treated component control

Viscosity inspection of mix compound

In-coming inspection system

Day21 Products defect/VOR Tire defect analysis

Emergency report system

VOR daily meeting

Green tire appearance inspection rule and other

Day22 Punching code system Punching code system/usage

Document & Data control Types and definitions of quality standard

Classification of specification

Role of administrative section

Step for implementation of setting and revision/repeal

Effect of the standard

Distribution of standard

Old document control

Sorting of change in Quality standard

Classification and content by specification number

Standard Register

Day23 Presentation Presentation about my experience

# 2. Introduce the KMITL and STW-lab

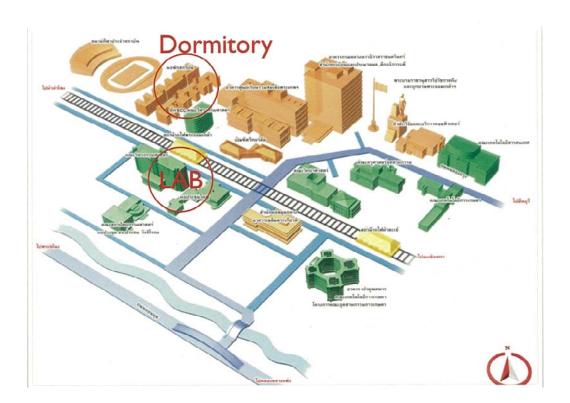
KMITL has 6 faculties Engineering, Architecture, Industrial Education, Science, Agriculture, Information Technology, Agroindustry. It is in the city of Bangkok,

Thailand. President name is Kitti Tiraseth. It has 18,000 students in undergraduate. It is the best university in the University of Technology in Thailand.

I belonged to the STW-lab in the faculty of Engineering. And I stayed in the dormitory. I showed the map in the KMITL. It has 10 research topics. The Fan and Plate Control via wi-fi network, The design of fuzzy logic controller for water level process, the design of load/unload algorithm for 2.5" HDD, The design of energy monitoring system via internet, Weather and environment monitoring system based on internet, Robot control using 3D camera, The simulation and design of level mix water process, Traffic light control program on the ipod touch, The design of state flow for small oven temperature control STM32MCU, The development of design digital weight scale application for ipod touch.

Every topic has 2 or 3 members. And they research themselves.

This lab's character is to use apple's product and use iOS. iOS means compiler use in iphone and any other apple products.



# 3. Experience in the KMITL

I studied in the KMITL for 14 days. My main experiences were to take a presentation, and speeches, iOS programming, attend the weekly meeting and advice and suggestion, study about culture and industry, take some tests.

# • iOS programming



I studied about iOS programming. I made some application. I felt it was so useful and easy to use. This compiler was so intelligent because if I wanted to write "IB0utlet" this means like "int" in C programming, I need to write only "IB" this compiler notices player wants to write "IB0utlet". And if we had some mistake in the program, it researches and prepares the program.

## • Study about Thailand culture



Took a presentation about Thailand culture by some students. Thailand has 5 parts. North and Northeast and South and Center. I studied Thailand foods and music and house and temples and occupation. Each part has traditional music and food and house. When I studied it, I already ate some foods. Everyone said "it's not spicy" but I felt so and so and so spicy. And I went to the musical to study Thailand culture. It was so beautiful. It showed Thailand old history. I could see many traditional cloths and music and instruments. Last time I took exam about Thailand culture. I could pass exam.

# • Study about Thailand industry



I studied 8 Thailand industries. Automotive industry, Iron and Steel, Alternative energy, Food, Petrochemical, HDD, Logistic, Software. Students took a presentation for me same culture. I felt all industries were growing and growing. Because graphs and GDP and prices were up every year. Only my thought, now Thailand depended on some developed countries. Thailand has a lot of Japanese companies and factories. Looked like old Japan and America. I think Thailand will be like Japan. Japan have to grow more and more in order to beat Thailand. Last time I took exam about all industries. I could pass the exam. It was very difficult for me.

#### Weekly meeting and my presentation

I already showed this lab had 10 research topics. In the weekly meeting, lab-students took a presentation each topic. When I stayed there, they took a presentation in English. I watched and listened their presentation and I discussed about their research. First meeting I speech myself and discussed and advised and said some

question. Second meeting I took a presentation about my research in English. I could get some meaningful advice.





## 4. Introduce the Thai Bridge Stone

Thai Bridgestone Co., Ltd has two plants, Rangsit Plant, Nong Khae Plant. I went to Rangsit Plant. Rangsit Plant has opened from 22<sup>nd</sup> January 1969. Number of employees is 1,540 persons as of June 2002. Production capacity is 7,400 tires per day as of June 2002. Site area is 180,000 sq.m. Location is 14/3 Phaholythin Road (33th km), Klong Nueng Klong Luang, Pathumthani 12120.

Every staffs can speak English. And some staffs can speak Japanese. If staff has the high English skill, they can be more high position. This company has TOIEC study class. They attend the class and get more skill. Thai Bridgestone has strong connection with Japan Bridgestone. They have to send every data for Japan. And every determinations

are done by Japan Bridgestone.

Thai Bridgestone is growing and growing. I think in the future Thai Bridgestone will get more good workspace and machine and benefit.



# 5. Experience the Thai Bridgestone

I studied about inspection. If I want to study about how to make tire, I can study only myself. So I picked up the test and inspection. But tire made from chemistry. My major is information technology. Tire is a little different my major but I'm interested in the car. And in the future I want to make car system. So this internship is very meaningful.

I already showed my schedule in the Bridgestone. I experienced many topics. My best experience is to attend the real business meeting. The meeting attended many nationality people. Main nationality is of course Thailand, other one is American who is a presenter, another is Chinese, of course I'm Japanese. I felt the real. Everyone spoke English so early. And I could see the real presentation. He took a presentation his product. First he advised Thai Bridgestone weak point, after he presented how meaningful his product in Thai Bridgestone. I felt this was the real way to take a presentation.

I took some experience every topic. In final product testing, my experiences are cutting tire and trimming tire.





In material inspection and testing, My experiences are business meeting and specific gravity check. I already said about business meeting. And I don't have meeting photo. I show the photo only when I took gravity check. That was like a science class. It was so fun for me.



And I took a presentation about my research and my experience and suggestion in Thai Bridgestone. I suggested some problem. My suggestion's key word is Automation and to use more computing. Because Thai Bridgestone was using many workers and some operations that I though it has to do by machine and computer was done by humans hands. And Thai Bridgestone was using paper documents. I think that it was not good to keep the information. Because document can be showed everyone on the same time. If they use only papers, these can use only one people. And I suggested the

data input way for the any machine. This is basic suggestion.

# 6. Impression in the internship

First I want to say "Thank you so much every staffs." Every staffs are very and very kind for me. And when I stayed in Thailand, I didn't know everything, but during I stayed I didn't confuse. Because staffs and students and Pro always took care for me and every time said something for me. When I arrived at the airport, I was a little nervous. But my feel was changed soon. Thailand people are so kind and friendly for me. They planed many party for me. This internship is to be my treasure.

And I joined Thai university. Thai university had a good quality and engineering levels. I belonged to STW-lab, it was using apple software. I know it is very expensive software. And I was surprised KMITL students. Because they had high English skill. I think that my university students can't speak enough English. Of course I don't have too. I think it's reason is if we stay in Japan, we don't have to speak English. I think that Japanese students have good English skill but they have only writing skill. Thai students have speaking skill. I think it is more meaningful skill. We have to lean form Thai people.

About the research, I think that it is same in Japan. But I think that STW-lab is richer than my lab. Because in STW-lab students can use the money to buy some machine, materials. I don't know the circumstance, but I was surprised.

When I stayed in lab, I took some presentations and some speeches in English. Everything is the first time for me. But these are so good experience for me. Because when I stayed in Japan, I don't use English. And always I take a presentation in Japanese. I don't need to use English in the meeting. But I stayed in Thailand, I have to use English. I think that I'm very shy. If I stay in Japan, I never use English. Because I can alive not to use English. My English was very poor, now I think my skill is a little growth. My presentation contents are my research, myself, experience, etc... I think every presentation is not good, but I could practice a lot. It makes me more good English speaker, I think.

In Thai Bridgestone, I studied about inspection and test. Because I wanted to know how to keep the products quality. In the future I want to make the car control system, so I have to study about the car parts. And my major is information engineering, but when I do the job hunting, I have to fight with many people have different major. To win them I have to have many information and knowledge. This internship is a good timing to get it. And I could talk with any staffs. They are so kind and have high pride. It was the first time to talk with engineering workers. In the future, I will be like them. Now I think I can't. I don't have enough skill and knowledge. I felt that I had to study more

and read more and more books. I talked with manager, he said "You have to show and aim all over the world. Now Japanese company's main customer is abroad. If you want to come up big , you work in global world." I knew the real. Japan is a little country, main market is China and America. In the business, we have to study English and Chinese.

Last, I want to say "Thank you every staffs in university and Bridgestone". I want to go back Thailand for the business. And if I can work in car industry I must go to Thailand. When I'll go back Thailand, I trust that this experience will be my ability.

Thank you for the every Mie university staffs. I could get many good experiences. This participation is so good for me.



Thank you my friends and teachers.

In the near future I want to be back.

I trust I'll be back to Thailand for my business.

Of course to see my friends.